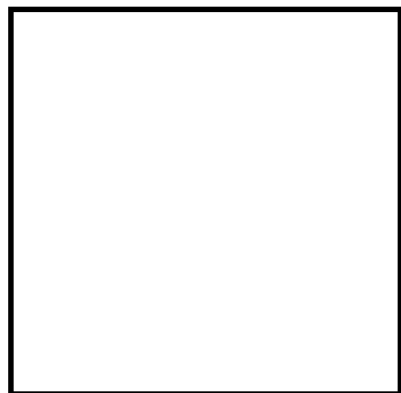


HIGHER EDUCATION UPDATE

NUMBER UP/97-9
DECEMBER 1997



News from the CALIFORNIA POSTSECONDARY EDUCATION COMMISSION

Jeff Marston, *Chair*
Guillermo Rodriguez, Jr.,
Vice Chair
Mim Andelson
Alan S. Arkatov
Henry Der
Joe Dolphin
Lance Izumi
Kyo "Paul" Jhin
David S. Lee
Bernard Luskin
Frank R. Martinez
Stephen R. McShane
Ralph R. Pesqueira
Khyl Smeby
John E. Stratman, Jr.
Gerti Thomas
Melinda Wilson

Warren H. Fox
Executive Director

1303 J Street, Suite 500
Sacramento, California 95814-2938
Telephone (916) 445-7933 (Voice)
FAX Number (916) 327-4417

Funding California's Capacity for Growth

Background

In 1995, the California Postsecondary Education Commission published two major reports on the subject of growth and reform in California higher education. These reports, *The Challenge of the Century* and *A Capacity for Growth*, outlined the parameters of the coming enrollment surge, known as "Tidal Wave II," and offered a number of strategies for accommodating that growth. Included in that assessment was a comprehensive analysis of higher education's need to maintain its existing infrastructure, provide for future growth, and undertake numerous renovations related to technology and seismic safety. That analysis suggested that California should spend approximately \$1 billion per year, every year, for at least the next ten years, and probably longer. This estimate did not include any funding for a possible tenth campus of the University of California in Merced. At the time it was developed, the estimate consisted of the two numbers that are shown in Display 1: \$625 million per year -- an amount needed just to ensure the continued usefulness and structural integrity of an existing physical plant of over 108 million square feet of space on 137 campuses; and \$400 million per year for growth. The total needed by each of the three public systems was approximately equal, between \$300 and \$400 million per year. The report also concluded that

. . . the Commission can find no combination of practical possibilities that would produce savings or revenue sufficient to satisfy the total need. Under the best of circumstances, it may be possible . . . to raise about half to two-thirds of the needed funds (CPEC, 1995, p. 10).

Display 1 Projected Annual Capital Outlay Costs in California Public Higher Education as of 1993-94 (Millions of Dollars)

System	Costs to Maintain the Existing Physical Plant	Costs to Provide for Enrollment Growth	Total
University of California	\$150	\$150	\$300
California State University	\$250	\$145	\$395
California Community Colleges	\$225	\$105	\$330
Total	\$625	\$400	\$1,025

Source: CPEC. *A Capacity for Growth*.

Several analyses since 1995 have confirmed the Commission's capital outlay funding projection. The Department of Finance's (DOF) most recent infrastructure report puts the 10-year need at \$9,897.8 million, about \$1 billion per year, but suggests that even a number that high may be understated due to incomplete projections in the latter years of the estimate (DOF, 1997).

The most recent estimates from the three public systems of higher education also suggest a greater need than previously projected. In the California Community Colleges, for example, the current backlog of projects is estimated to be between \$4 and \$5 billion. If such numbers are amortized over a 10-year period, as DOF did in its analysis, then \$500 million per year, in today's dollars, will be needed in that system alone. The California State University's most recent budget submission places its five-year need at \$1,988.9 million, or \$397.8 million per year. For the University of California, the most recent estimate from the Office of the President is for \$200 million to maintain the existing physical plant, \$125 million for growth through 2010, and \$35 million between 1998-99 and 2009-10 for the proposed 10th campus in Merced; a total of \$360 million per year. Higher education's overall total comes to about \$1.26 billion per year, or about \$12.6 billion over a 10-year period. Such a figure, while higher than the DOF estimate, probably represents the most accurate current assessment of real need.

Sources of funding

Over the past ten years, total bond spending for public higher education has totaled \$5.7 billion -- an average of about \$287 million per year. Other sources add to this total, such as revenue from tidelands oil leases (the Capital Outlay Fund for Public Higher Education -- COFPE), pay-as-you-go funding, and matching funds from local community college districts, but none of them has generated any significant revenue in recent years. Interested readers can find additional information for these revenue sources in *Fiscal Profiles* (CPEC, 1997).

Display 2 on the next page presents a history of bond issue elections for both K-12 and higher education since 1972. It shows that most bond issues were approved by a majority of the voters; it may also indicate that the size of the bond issue proposed is less important in the voters' minds than the economic conditions that prevail at the time the election is held. For example, relatively small bond proposals in 1976 and 1978 were defeated, per-

haps because of the very unsettled economic conditions at the time, including high inflation, high interest rates, and uncertainties about oil supplies. When conditions improved, between 1982-1992, a series of much larger bond issues for both K-12 and higher education were all approved. The recession of the early 1990s caused several proposals to be defeated; even then, however, all of these elections were close -- a possible indication that education remains popular even when people are concerned about their own economic future. Also in 1990, the voters narrowly defeated Proposition 136 (52.1 percent opposed to 47.9 percent in favor). This measure would have reduced the requirement for passage of local bond issues from the current two-thirds to a simple majority. In the more prosperous times of the present, the electorate might consider such a reduction in the vote requirement in a more favorable light, especially if the proposal was for only a modest reduction to 60 percent. The Commission proposed this modification in *The Challenge* in lieu of a reduction to a simple majority.

As noted above, historically, capital outlay funding has not come solely from State sources. Throughout the 1960s and most of the 1970s, local community college districts contributed substantial amounts of support to their own building programs, usually through matching programs with the State. Some of this funding came from the few bond issues that obtained the requisite two-thirds vote, but most came from *ad valorem* tax overrides. In some cases, these overrides could be voted directly by governing boards, but in most instances, they required a simple majority vote of the local electorate for approval. This kind of funding largely disappeared, however, with the passage of Proposition 13 because the State assumed full responsibility for community college capital outlay projects on the rationale that local funding was no longer feasible.

In the past, only the University of California has been successful in securing large amounts of revenue for capital building programs -- an average of \$424.7 million per year over the past ten years (CPEC, 1997). These amounts have commonly been dedicated to ancillary facilities, such as stadiums, arenas, and museums. Increasingly, however, the University has been successful in obtaining significant donations for core academic facilities, such as the Haas and Anderson Business Schools at Berkeley and UCLA, respectively. Those two campuses have received the bulk of the funds; however, the University is anxious to expand its strong fund-raising programs because it hopes that these efforts will provide greater funding for the

other general campuses as well as for the medical schools.

The California State University has garnered little support historically from private fund-raising efforts, but there have been some good years where \$50 million or more for capital projects has been received. At present, with a strong and growing consciousness of great restrictions in capital funding, the Chancellor and all of the State University's presidents are extending their activities in the fund-raising area. The most recent example of this is the successful negotiation with a consortia of computer and telecommunications companies (Fujitsu, GTE, Hughes, and Microsoft) -- an effort that will provide about \$300 million over a period of several years to build a state-of-the-art electronic infrastructure for the entire system.

Even with all of these efforts, however, there is little doubt that higher education will continue to rely on the State for the majority of capital outlay funding. Moreover, little doubt exists that the primary source of that funding will be General Obligation bonds. The next section of this Update discusses the State's bonding capacity and the likelihood that sufficient funds can be raised to meet demonstrated capital requirements.

State bonding capacity

In its annual report on State capital outlay infrastructure, the Department of Finance (DOF) estimated in March 1997 that California needed to spend about \$80 billion over the next ten years for transportation, prison construc-

Display 2 A History of K-12 and Higher Education Bond Issues, 1972 to 1996 (Failed Bond Issues are Shaded)

Month/Year	<u>K-12 Bond Issues</u>			<u>Higher Education Bond Issues</u>		
	Amount (Millions of Dollars)	Vote For	Vote Against	Amount (Millions of Dollars)	Vote For	Vote Against
November, 1972 ¹				\$160.0	56.9%	43.1%
November, 1972 ²				\$155.9	60.0%	40.0%
November, 1974	\$150.0	60.1%	39.9%			
June, 1976 ³	\$200.0	47.3%	52.7%	\$150.0	43.9%	56.1%
June, 1978	\$350.0	35.0%	64.0%			
November, 1982	\$500.0	50.5%	49.5%			
November, 1984	\$450.0	60.7%	39.3%			
November, 1986	\$800.0	N/A	N/A	\$400.0	N/A	N/A
June, 1988	\$800.0	65.0%	35.0%			
November, 1988	\$800.0	61.2%	38.8%	\$600.0	57.7%	42.3%
June, 1990	\$800.0	57.5%	42.5%	\$450.0	55.0%	45.0%
November, 1990	\$800.0	51.9%	48.1%	\$450.0	48.8%	51.2%
June, 1992	\$1,900.0	52.9%	47.1%	\$900.0	50.8%	49.2%
November, 1992	\$900.0	51.8%	48.2%			
June, 1994	\$1,000.0	49.6%	50.4%	\$900.0	47.2%	52.6%
March, 1996 ⁴	\$2,025.0	61.6%	38.4%	\$975.0	61.6%	38.4%

1. Community college facilities only.
2. University of California health sciences only.
3. \$150 million would have been for community college facilities only.
4. Combined K-12 and higher education bond issue of \$3.0 billion.

Sources: Department of Finance. *Capital Outlay & Infrastructure Report, 1997*, and Secretary of State Archives, Reference Division.

tion, parks and recreation, elementary and secondary education, higher education, and other purposes, such as the construction and renovation of State office buildings. Of this amount, approximately \$27.8 billion was for transportation, virtually all of which is derived from federal highway trust funds or statewide gasoline taxes. The remaining amount -- \$51.7 billion, or as much of it as can be met -- needs to be financed through General Obligation bonds that must be approved by a majority of the State's voters. Display 3 offers a summary of the DOF estimates. It should be noted that only about half (48.3 percent) of the identified need for all non-transportation activities can be met. Display 4 indicates higher education's share of the total need, excluding transportation, is 20.2 percent.

The Department of Finance estimates that California should sell no more than \$20.2 billion in bonds over the

Display 3 Projections of Capital Outlay Need, 1997-98 to 2006-07

Total Estimated Needs, Excluding Transportation

Agency	Amount (Billions of \$)	Percent
Business and Housing	\$0.2589	0.5%
Resources & Environmental Protection	\$7.4920	14.5%
Other	\$2.2848	4.4%
Higher Education	\$10.4598	20.2%
K-12	\$22.0000	42.6%
Youth/Adult Corrections	\$9.1611	17.7%
Total	\$51.6566	100.0%

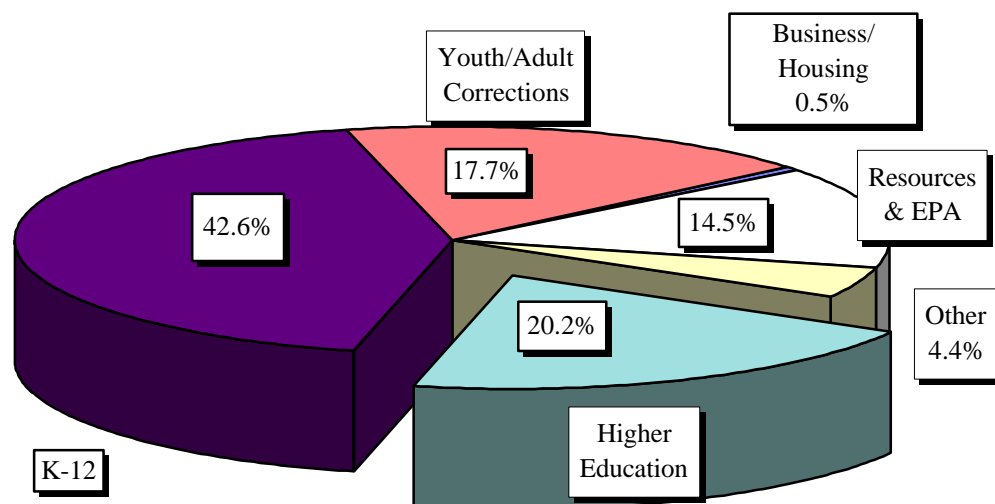
Estimated Sources of Revenue

Agency	Amount (Billions of \$)	Percent
Existing Bond Funds	\$0.9000	1.7%
Federal Funds	\$12.3375	23.4%
Special Funds	\$18.3231	34.7%
Pay-as-you-go Financing	\$1.0000	1.9%
Bonds (Gen. Oblig. & Lease/Payment)	\$20.2000	38.3%
Subtotal	\$52.7606	100.0%
Amount for Transportation	\$27.8000	
Total Available, Non-Trans. Needs	\$24.9606	

Percent of Non-Trans. Needs Met 48.3%

Source: Dept. of Finance. *Capital Outlay Infrastructure Report, 1997.*

Display 4 Estimates of Capital Outlay Need, Excluding Transportation 1997-98 to 2006-07



Source: Department of Finance. *Capital Outlay Infrastructure Report, 1997.*

next ten years, or about \$2 billion per year, with no adjustment for inflation. This figure rests on four assumptions:

- ♦ The General Fund will grow at a 5.3 percent annual rate;
- ♦ Debt service on outstanding bonds will be no more than 6.0 percent of the General Fund;
- ♦ General Obligation bonds will be issued at a coupon rate of 6.5 percent; and,
- ♦ Lease-Revenue bonds will be issued at a coupon rate of 7.0 percent.

The DOF assumptions were entirely reasonable at the time they were made (Spring 1997) and the 6.0 percent limitation on debt service, as a percentage of the General Fund, remains so today. In the six to nine months since, however, some circumstances have changed enough -- particularly General Fund growth and the line in interest rates -- to suggest that the amount of funds that can prudently be issued may have grown considerably.

In 1995, the Commission estimated that the General Fund should grow at a rate of 5.2 percent per year -- about the same as the most recent DOF rate of 5.3 percent. In retrospect, since California emerged from the severe recession of the early 1990s, growth has been closer to 7.0 percent. Moreover, there is considerable promise that the General Fund will continue to grow for the foreseeable future at a rate

of at least 6.0 percent per year. In addition, interest rates have declined dramatically -- the most recent sale of lease-revenue bonds by the State Treasurer carried a coupon rate of between 5.0 and 5.9 percent, depending on the maturity date. This rate is considerably less than the 7.0 percent rate estimated by DOF earlier this year.

These occurrences permit an alteration in DOF's basic assumptions and suggest that the amount of bonds the State can sell in the future is considerably greater than previously thought. In *A Capacity for Growth*, the Commission displayed the results of a complex computer model that showed a number of alternative scenarios for bond sales and amortization (see CPEC, 1995b, p. 146). At the time, it contributed to the Commission's conclusion that only half of higher education's capital requirements were likely to be met through bond sales. In this Update, the model has been revised to reflect potential bond sales in the following amounts:

- ♦ \$2 billion in bonds each year (the DOF estimate);
- ♦ \$3.5 billion per year; and,
- ♦ \$5.0 billion per year.

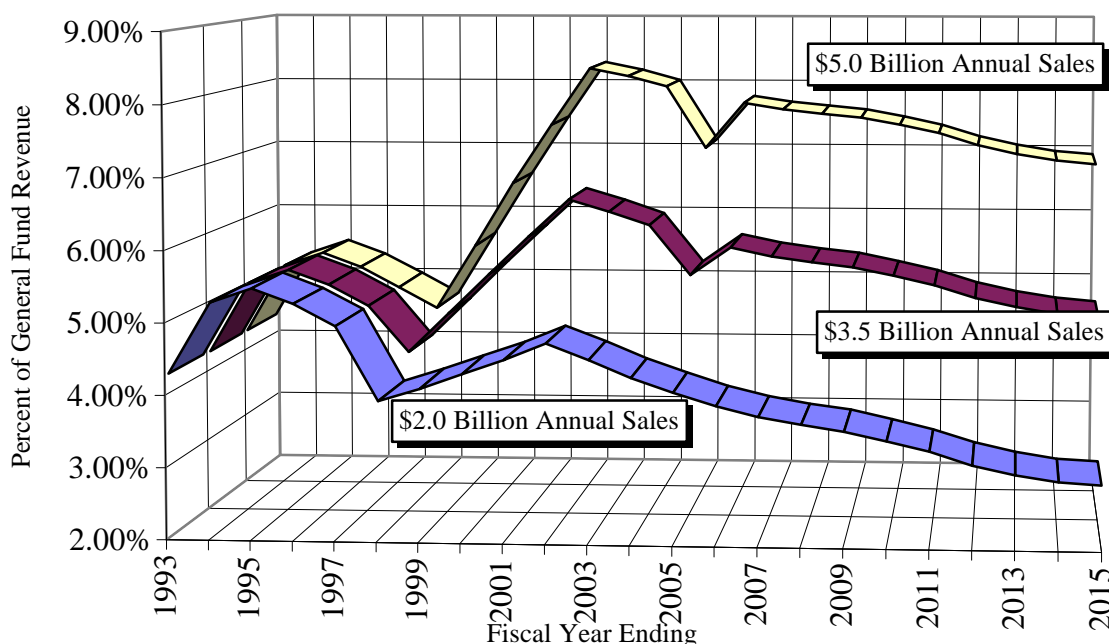
In each scenario, it is assumed that General Fund revenue will grow at a 6.0 percent annual rate -- a figure that is less than recent experience -- but slightly greater than the

DOF estimate. It also assumes that interest rates will be the same as they were six months ago -- about 5.0 to 5.9 percent -- even though interest rates today are lower than they were then and the overall trend of interest rates appears to be on a further downward slope. In addition, annual bond sales are adjusted upward by 3.0 percent annually to reflect inflation, even though inflation is currently running at just over 2.0 percent annually. The DOF assumed no inflation factor in its calculations.

These three bond levels produce the following scenarios, as presented in Display 5:

- ♦ At the DOF level of \$2 billion in annual sales, even with 3.0 percent annual adjustments for inflation, General Fund debt service requirements never exceed 4.7 percent and decline continually after 2002.
- ♦ At a \$3.5 billion per year starting level, debt service reaches a high of 6.3 percent of the General Fund in 2003, and declines thereafter.
- ♦ At a \$5.0 billion per year level -- an amount that would meet all projected capital outlay requirements -- debt service rises to unacceptable levels. It reaches a high of 8.3 percent in 2002 and never falls below 6.9 percent even in 2015, the final year of the projection.

Display 5 Projected Debt Service as a Percentage of General Fund Revenue, 1992-93 to 2014-15



Source: State Treasurer; CPEC staff analysis.

This display indicates that the State's limit on bonded debt is much closer to \$3.5 billion in annual bond sales than it is to the current DOF projection of \$2.0 billion per year.

Implications for access and quality

It was noted earlier in this report that the Department of Finance estimated that only 48.3 percent of California's non-transportation capital outlay requirements could be met through current sources of revenue, primarily through the sale of General Obligation or Lease-Revenue bonds (see Display 3). This estimate has represented the conventional wisdom for several years and led to the Commission's estimate in *A Capacity for Growth* that it would be possible to meet only about half of higher education's \$1 billion annual need for construction funding.

The Commission's most recent analysis suggests that the need for capital funding has grown from just over \$1 billion in 1995 to about \$1.26 billion today. Moreover, it is probable that the State's overall need, as DOF suggested in its March report, is conservative and may not be \$51.7 billion in non-transportation costs, but 10 percent higher, or about \$56.8 billion. If that probability is compared to the revenue projection of \$3.5 billion in annual bond sales -- plus about \$100 to \$150 million additional in pay-as-you-go financing -- then the State's capacity to fund capital outlay grows from the current estimate of 48.3 percent to almost two-thirds of the total need (64.3 percent).

Improvements in California's fiscal condition, which result from the combination of a robust economy, low inflation, and declining interest rates, strongly suggest that a 1998 bond issue in the amount of \$1.5 billion is both desirable and affordable. Such a proposal, if approved by a majority of the voters, would provide each of the public higher education systems with \$250 million in financing per year over a two-year period -- half of the identified need in the community colleges and about two-thirds of

the need at the California State University and the University of California. Private fund-raising in the two university systems, plus the addition of further funding from the State University's telecommunications consortia mentioned earlier on page 3 of this Update, could reduce the remaining gap or close it completely.

The greatest funding challenge appears to be in the California Community Colleges -- the system with the largest backlog of projects and, arguably, the greatest need for funding. Community college districts, however, also have very little debt due to the great difficulty of obtaining a two-thirds majority of the electorate for bond authorizations or other local spending initiatives. Reducing the current constitutional super-majority requirement from 66.7 to 60 percent, or even a simple majority, and requiring local districts to match State resources on a dollar-for-dollar basis could begin a process whereby the current physical erosion of the community colleges could be halted and ultimately corrected entirely over a period of ten years. Such financing would also provide for seismic and other health and safety needs as well as the needed facilities for the coming enrollment surge.

References

- California Postsecondary Education Commission. *The Challenge of the Century: Planning for Record Student Enrollment and Improved Outcomes in California Postsecondary Education*. CPEC Report No. 95-3. Sacramento: The Commission, April 1995a.
- . *A Capacity for Growth: Enrollments, Resources, and Facilities for California Higher Education, 1993-94 to 2005-06*. CPEC Report No. 95-9. Sacramento: The Commission, August 1995b.
- . *Fiscal Profiles*. CPEC Report No. 97-8. Sacramento: The Commission, October 1997.
- California State Department of Finance. *Capital Outlay and Infrastructure Report, 1997*. Sacramento: The Department, March 1997.